(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 5 February 2004 (05.02.2004)

PCT

(10) International Publication Number WO 2004/011214 A3

(51) International Patent Classification7: B27K 3/15, 3/50

(21) International Application Number:

PCT/NO2003/000251

(22) International Filing Date: 21 July 2003 (21.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

20023592 26 July 2002 (26.07.2002) NO

(71) Applicant (for all designated States except US): WOOD POLYMER TECHNOLOGIES ASA [NO/NO]; c/o Innovation, P.O. Box 1431 Vika, N-0115 Oslo (NO).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SCHNEIDER, Marc, H. [CA/CA]; 999 Clements Drive, Fredericton, New Brunswick E3A 7J3 (CA).

(74) Agent: ONSAGERS AS; P.O. Box 6963 St. Olavs plass, N-0130 Oslo (NO).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 10 September 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FURAN POLYMER IMPREGNATED WOOD

(57) Abstract: A furan polymer impregnated wood which comprises wood impregnated with a polymerizable furfuryl alcohol monomer mixture containing at least water and furfuryl alcohol, and an initiator selected from the group consisting of anhydrides, acids and combinations thereof is described. For longer storage life, the mixture contains a stabilizer selected from sodium carbonate, sodium bicarbonate, sodium citrate, phosphates and water-soluble lignin derivatives such as calcium and ammonium salts of lignosulfonic acids, and combinations thereof. A method for preparing a furan impregnated wood and uses thereof is also described.



F 87 2004

SOLVEIG GUSTAVSSON /EÖ

Authorized officer

	INTERNATIONAL SEARCH RE	PORT	In''-al Application No			
- 10-			0 03/00251			
A. CLASSI	FICATION OF SUBJECT NOTER B27K3/15 B27K3/50					
	22/10/20					
According to	o International Patent Classification (IPC) or to both national da					
	SEARCHED	SSIRCATION AND IPC				
Minimum do	ocumentation searched (dassification system followed by dass	ification symbols)				
IPC 7	B27K					
Documenta	tion searched other than minimum documentation to the extent	that such documents are inclu	ded in the fields searched			
Electronic d	late base consulted during the lateractional asset forms. It is					
EPO-In	ata base consulted during the International search (name of da	ta base and, where practical,	search terms used)			
EPU-111	ternai					
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT					
Category °	Citation of document, with indication, where appropriate, of the	ne relevant passages	Relevant to claim No			
		· · · · · · · · · · · · · · · · · · ·				
P,X	WO 02 060660 A (SCHNEIDER MARC	C H ;WOOD	1-9			
	POLYMER TECHNOLOGIES AS (NO)) 8 August 2002 (2002-08-08)					
	esp. the claims					
Α	US 2 909 450 A (GOLDSTEIN IRV) 20 October 1959 (1959-10-20)	1-9				
	the claims, column 1, lines 61	1-65 and				
•	example II	. oo ana				
Α	WO 02 30638 A (SCHNEIDER MARC	H •NOOD	1.0			
•	POLYMER TECHNOLOGIES AS (NO))	n ,wood	1-9			
	18 April 2002 (2002-04-18)					
	the whole document		·			
	~~~		·			
<u> </u>	ner documents are listed in the continuation of box C.	X Patent family n	nembers are listed in annex.			
	tegories of cited documents :	"T" later document publ	ished after the international filing date			
consid	ent defining the general state of the art which is not lered to be of particular relevance	cited to understand	I not in conflict with the application but it the principle or theory underlying the			
filing d		"X" document of particu	iar relevance; the claimed invention red novel or cannot be considered to			
which	ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another	involve an inventiv	e step when the document is taken alone			
citatio	n or other spedal reason (as spedified) ent referring to an oral disclosure, use, exhibition or	cannot be conside	lar relevance; the claimed invention red to involve an inventive step when the			
other r	means	accument is comp	ined with one or more other such docu- ination being obvious to a person skilled			
later th	ent published prior to the international filing date but aan the priority date dalmed		of the same patent family			
Date of the	actual completion of the international search	Date of mailing of the	Date of mailing of the international search report			

The factor of the ISA Patentia of Patentia Form PCT/ISA/210 (second sheet) (July 1992)

Name and mailing address of the ISA

26 October 2003

## **INTERNATIONAL SEARCH REPORT**

International Application No

0 0	3/	00	25	
	0 0	0 03/	0 03/00	0 03/0025

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 02060660	A	08-08-2002	NO CA EE WO US	02060660		02-08-2002 08-08-2002 15-10-2003 08-08-2002 19-12-2002
US 2909450	Α	20-10-1959	NONE			
WO 0230638	A	18-04-2002	NO AU CA EE EP WO	200300146 1341648	A A1	15-04-2002 22-04-2002 18-04-2002 15-10-2003 10-09-2003 18-04-2002